

FINAL
ENVIRONMENTAL IMPACT STATEMENT
FOR
BALDWIN HIGH SCHOOL
INDUSTRIAL ARTS CLASSROOMS
MAUI, HAWAII
D.A.G.S. JOB NO. 05-16-5842.2

BY THE
DIVISION OF PUBLIC WORKS, D.A.G.S.

MAY 16, 1972

I. Project Description and Need

A. Description

The project site is within the existing school campus in Wailuku, island of Maui, as shown on the attached site plan. The project will include the construction of two (2) single story buildings for automotive mechanics and wood laboratories, the renovation of an existing building into a drafting classroom, and related sitework and utilities.

B. Parking

Sixteen paved parking stalls will be provided. The wearing surface will be asphaltic concrete.

C. Need

This facility is required to meet the State's educational goals stated in paragraphs V.B. and VII. The planning and construction will follow the Educational Specifications and Standards for Facilities, Department of Education, dated April, 1970. Pages 95 to 102, inclusive, and pages S-5 to S-7, inclusive, of the Educational Specifications are attached as part of the appendix.

II. Impact of Project

A. Social

1. Public Safety

a. The design will recognize public safety in all aspects and no compromises will be made. Exit requirements, railings, stairs and ramps are in accordance with the Uniform Building Code. Provisions for accessibility and toilet accommodations will be constructed to accommodate the handicapped in accordance with specifications of the American Standard Association.

b. A temporary barricade will be erected around the construction site to protect the public and students from injury during construction.

2. Neighborhood Character

a. The project will not disturb the present character of the neighborhood. The project will be aesthetically designed so as to be compatible with the existing school campus character.

3. Religious Institutions

- a. No churches will be displaced by this project.

4. Replacement Housing

- a. No housing will be affected by this project.

B. Economics

1. Employment

- a. This project will require a labor force for construction. After it is constructed, no additional personnel will be required to operate it.

2. Removing Land From Tax Base

- a. Acquisition of additional land is not required since the project is to be built within the existing school property. The land has already been removed from the tax base.

3. Displacement of Families and Businesses

- a. No families or businesses will be displaced.

4. Project Costs

Design Engineering	\$ 26,000
Construction & Contingencies	425,000
Equipment	2,000
Construction Engineering	<u>8,000</u>
Total Estimated Cost	\$461,000

5. Maintenance and Operating Features

- a. Maintenance and operating features will be kept to a minimum. Nite lights are on a time switch. Security gates and security screens are provided to minimize vandalism.

6. Replacement Facilities

- a. The project will replace the existing sub-standard classrooms and shops for the industrial arts program.

C. Environmental

1. Aesthetic

- a. The project will be aesthetically designed. The siting and exterior design have been approved by the Department of Planning and Economic Development.

2. Recreation

- a. No park lands will be acquired for this project.

3. Fire Protection

- a. No fire protection facilities will be displaced.
- b. Fire protection will be provided by the County Fire Department.

4. Public Utilities

- a. The project will be serviced by public utilities, all connections of which will be approved by the various utility companies and governmental agencies.

5. Conservation

- a. The project will have no adverse effects on fish and wild life resources.
- b. Existing trees will be preserved and/or relocated as required. All relocations will be approved by the Using Agency.
- c. All areas disturbed during construction will be grassed.

6. Natural and Historic Landmarks

- a. There are no natural or historic landmarks located within the project area.

7. Noise Pollution

- a. Noise will be generated during construction from heavy equipment such as tractors, trucks and compressors.
- b. Pile driving is not required.

8. Dust Pollution

- a. Dust pollution during construction will not be a serious problem.
- b. Sprinkling will be required whenever excessive dust conditions occur.
- c. Fine wood particles will be produced while using the shop equipment such as the table saw, radial saw, and joister. A mechanically operated dust collection system will be installed to collect the particles at the point of discharge.

9. Water Pollution

- a. There will be no water pollution. Runoff will be directed to flow into existing systems.

10. Environmental Protection in Construction Specifications

- a. Refer to attachment, Section 1-G, Environmental Protection.
- b. Chapter 43, Air Pollution Control, Department of Health.

11. Waste Disposal

- a. Solid wastes are to be stored in metal "dumpster" containers and disposed of by the County Refuse Department.
- b. Sewage is to be connected to the existing sewer system. The sewer outfall is outside of Kahului Harbor.

12. Education

- a. The project is an educational facility, see Project Description and Need.

III. Adverse Environmental Effects Which Cannot Be Avoided Should The Project Be Implemented

- A. The area will have to be cleared and graded for construction. Measures will be taken to minimize dust problems during construction. All grading work shall be in accordance with current Grading Ordinance.

B. Drainage patterns will be modified within the building area. These patterns will be properly designed so as to direct surface water into the existing surface drainage system away from buildings and away from neighboring lots.

C. Some plant life and grassing will be affected; however, new grassing and landscaping will be provided.

IV. Alternatives

A. An alternative considered would be to abandon the project, in which case the Using Agency would carry on their program with sub-standard facilities.

B. Another alternative considered would be to resite the project. It is to be noted that the siting is in accordance with the orderly growth of the school campus.

V. Relationship Between Local Short-Term Uses of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity

A. The project entails a trade-off between depletion of the resources for construction and the enhancement of the educational, social and cultural needs of the community.

B. Education is a prime goal of the State of Hawaii. Education is compulsory up to age 18.

VI. Irreversible and Irretrievable Commitments of Resources

A. Land

1. The land is already owned by the State of Hawaii.

B. Labor

1. The project will require a labor force for construction. No additional personnel will be required to operate the facility.

C. Material

1. Construction materials used in this project are irretrievable, except for portable items which may be re-used. Concrete and masonry may be re-cycled as landfill material.

VII. Social Costs and Benefits of Project

The benefits derived from this project, being an educational facility, are intangible in nature. It can be said that an

education is invaluable in order to enjoy life to the fullest, economically, culturally and socially.

As a goal of the State of Hawaii to provide equal educational facilities for all students, the project will be designed within the current construction cost, providing a standard facility in accordance with the Educational Specifications.

The benefits are immeasurable in human resource in comparison to the capital outlay.

3101.

90° 00' 15" 400.00

← TO WAILUKU TOWN



53.51.6

30' 00" 15" - 315.00

90° 00' 15" E — 13° 15' 17"

APPENDIX

(4) INDUSTRIAL ARTS

Objectives/Learning Outcomes

The objectives of the Industrial Arts Program are to develop students with skills, understanding and knowledge of the industrial and technological aspects of our society. Students acquire:

- . Understanding of process of producing goods and the technological effects
- . Skills in use of tools, machines and materials to create forms
- . Insight into contributions of technology to various aspects of living

Description

This program, at the intermediate school level, is designed to provide the students with basic exploratory experiences, primarily in the areas of communications and manufacturing technology, which includes units in drafting, metals, woods, graphic arts, and electricity. Through these experiences, the students develop an appreciation of industrial design, good workmanship, safe work habits, orderly procedures, and understanding of common tools, machines, and devices. To study the underlying functions of industry and to explore their interrelations are all part of the total program.

Industrial Arts program at the high school level is designed to provide the students with broader exploratory experiences and also experiences more complex and extensive than at the intermediate level. The knowledge and skills of materials, tools, processes, and products of the communications and manufacturing industries are extended to include the areas of electronics, construction, power and transportation, and the services. Research and development, design and planning, organization, finance, and the production and distribution processes, are elements of industry and also part of the instructional content of the program.

The program enables the student to go in one of two directions. The first enables the student to explore further his area of interest and aptitude, and the second offers the student an opportunity to concentrate in a selected area of interest. Whichever path the student selects, opportunities for experimentation, problem-solving, the application of scientific principle and the integration of physical, chemical, and electrical forces dealing with the materials and processes of industry and technology are made possible.

Implications for Facilities

Each intermediate school campus shall be provided with a general industrial arts shop-laboratory (ies) which shall provide for the use of equipment and tools which will provide introductory experiences in industrial crafts, drafting, electricity-electronics, graphic arts, metals, and woods.

Each senior high school campus (or each educational complex campus) shall be provided with at least one industrial education center for the industrial arts and industrial-technical occupations programs. The center shall contain:

- . A metals technology shop-laboratory
- . A woods technology shop-laboratory
- . An electricity-electronics technology shop-laboratory
- . A graphic arts technology shop-laboratory
- . An automotive and power mechanics technology shop-laboratory
- . A drafting technology classroom

Each of the shop-laboratories mentioned above shall have space for the safe operation of machines and tools, space for the finishing of projects and space for the storage of supplies and projects. There shall be provisions made for student lockers (to permit change of clothing) and for washing up.

Each shop-laboratory shall have an adjacent classroom which shall have provisions for audio-visual-ETV usage and adjacent teachers' offices with shelving for resource instructional materials for individual or group projects.

Orientation and Relationships

Industrial Arts laboratories shall be housed in one or more buildings or wings planned as an integral part of the school plant.

Laboratories shall be situated such that they are accessible for evening school use, do not interfere with other school activities because of noise, have access driveways and exits. Laboratories with heavy equipment should be located on one ground floor.

Where there are two or more drafting rooms, these should be designed to be used jointly for large group instruction.

Where there are two or more adjoining classrooms, they shall be so designed to be used for large group instruction.

Activities in the industrial arts program are laboratory activities correlated with class discussions, demonstrations and study, which provide for the practical application of mathematics, science and language arts. Students have an opportunity to select, design, plan, and make appropriate articles.

The program consists of activities in the following areas:

- . Power and Automotive Mechanics - bench work, engine and chassis, electrical, service, and body work.
- . Drafting and Design - mechanical, engineering and architectural drafting, model building and reproduction techniques.
- . Electricity and Electronics - construction and servicing of electrical equipment, appliances and devices used in generation, transmission, distribution, etc. of electrical power. Electronics as applied to communication (radio and television) and the industrial control system.
- . Graphic Arts - photography, silk screen, composition, press work, printing, lithography, etc.
- . Metals - sheetmetal, art metal, forging and heat treating, welding, bench metal, machine tool work, plating and related processes and an introduction to production line techniques.
- . Woods and Allied Materials - furniture and cabinet-making, bending and lamination, upholstery, finishing, mass production, basic carpentry, experimentation with plastics and resins, and materials testing.

Internal Traffic

Movement of students within the lab from work station to work station, and from work station to service areas is characteristic of lab activity. Typically, the pattern for movement of materials is from delivery point to storage, to equipment for rough shaping, to other equipment or work bench, to storage, to work bench to finish area, and out of the lab. Students' paths shall fan out, rather than criss-cross. Distinct aisles of travel should be provided for free flow of traffic among all areas and points of common usage.

Main aisles of travel should be no less than 4 feet wide with feeder aisles at least 3 feet wide.

The location of equipment, work stations, and service areas shall be determined by the patterns of movement within the lab. Adequate space must be provided for movement of students and materials. Open space shall be provided near entrance to the labs, tool panels, supply and storage rooms, student lockers, and clean-up facilities to avoid congestion in these areas.

Areas around equipment which will handle the initial cutting or shaping operations on large pieces of stock shall be open and free of obstructions. The lab shall have at least two exits, one of which will handle large items of equipment and materials.

Utilities

Power and light controls shall be centralized on a master control panel with lock. Wall plugs shall be provided along the wall benches. Convenience outlets shall be provided from the ceiling (rail type for flexibility, rather than from the floor). A starter and overload switch shall be provided for each machine in the lab. Each power machine shall have a protective ground.

There shall be a sink with soap and towels provided in each shop. Toilet-lavatory facilities should be provided in each area.

Compressed air shall be provided for all labs at convenient locations with diaphragm valves to control the pressure. The air compressor shall be located outside the building to eliminate the noise factor. Wherever feasible, air supply should be from a central source.

Fluorescent lighting shall be provided for all labs, related classrooms and drafting rooms. The lights in the electricity and electronics labs shall be filtered.

Gas shall be provided with gas outlets for foundry unit, heat-treating, forging, and soldering areas.

Each lab shall be provided with facilities for students to wash and drinking fountain located where it will not cause congestion. Clean-outs shall be readily accessible where grease is a problem.

Space shall be provided for waste and refuse containers.

Audio-visual

Audio-visual requirements include chalkboard, tackboard, daylight screen, and light control (window darkening device - opaque louvers or ceiling track with roller carriers for blackout curtains).

There should be provisions for both open and closed circuits for ETV.

Ventilation - (Dust Collection and Exhaust Systems)

Dust, smoke, fume vapors and gases should be exhausted by mechanical means for:

- Power and Automotive Lab - welding and engine areas, spray booth
- Graphic Arts Lab - photo and developing room
- Metals Lab - welding and forging areas and finishing room
- Woods Lab - surfacer, sanders, saws, jointer, and the finishing room
- General Lab - welding and forging areas

Special Requirements

Lab ceiling height shall be a minimum of 14 feet for auto, 12 feet for metals and woods, and 10 feet for drafting, electricity/electronics, industrial crafts, and graphic arts.

Floors and related classrooms, drafting rooms, graphic arts, and electricity/electronics labs shall be covered with vinyl tile or comparable material.

Floors shall be slip resistant with special non-skid material around machine.

Floors around work benches and testing and communications areas in electricity/electronics labs shall be insulated to prevent electrical shock.

Bare concrete floors are acceptable for lab areas, provided they are reinforced, level, and have a carefully troweled finish. A sealer or hardener shall be applied to prevent "dusting" and to reduce the porosity of the concrete. These treatments, however, must not result in a "slick" surface that will constitute a hazard to those working in the lab.

Windows in labs shall be placed 72 inches above floors to provide wall space and to prevent window breakage.

Partitions between lab and classroom shall contain wired glass windows for safety and more adequate supervision.

Interior partitions shall be so constructed that they may be removed or changed without affecting the building support.

A separate office shall be provided for the instructor. Placement of this office shall be such that it permits supervision of the entire lab. Bench work area shall be separate from the machine area.

Fireproof tops shall be put on benches where gas heating furnace are installed; also for electrical work benches.

First aid cabinets and mirrors shall be provided in every lab.

Fire extinguishers must be located near danger points and labeled conspicuously.

Antenna and tower for communication shall be provided for the communications room in the electronics lab.

All parts of lab where students work shall be visible to instructor.

Security or deterrent measures from burglary and vandalism shall be provided for windows and other areas where entry into lab buildings can be made without too much effort.

Enrollment - Related classrooms, drafting rooms and labs shall be designed to accommodate 32 students.

General Comments - Where heavy equipment is to be installed in the various lab facilities, contact shall be made with the Industrial Education Section of the Department of Education as to type and power required.

Enough space shall be provided to project display and store all necessary hand tools in a central location. Due to the many different types of lab facilities required, no hard and fast recommendations for one type would fit in every situation. Security measures shall be provided.

Machinery must be placed where it will not endanger students due to moving parts or other hazards of particular machine.

Machines commonly used in sequential order or on a production basis shall be placed in the order of their operation with a minimum of travel between them. Arrange groups of machines away from the aisles and routes used by students.

Equipment and work stations shall be arranged to provide operating space.

Lighted built-in exhibit cases shall be provided in the lab and in a central location in the principal part of the building.

Floor Area

General Industrial Arts Lab (Intermediate School)

Classroom, related and drawing
Lab area
Paint room and paint storage
Project storage - 5 units
Material and supply storage
Office
Toilet facilities

Power and Automotive Mechanics Lab

Classroom
Lab area, outside, paved
Work area, inside
 Bench work
 Engine, stationary
 Service
 Repair and testing
 Tool and display cabinet
Office and supplies room
Locker room and toilets
Combustible liquid storage
Test equipment and parts room
Air compressor shed
Automotive spray booth

Drafting Room

Drawing area
 Display cabinet
 Model making
 Raised platform
 Instrument cabinet
Storage

Electricity and Electronics Lab

Classroom
Lab area
Communications room
Testing room
Project storage - 3 units
Adult storage
Office and supply room
Locker and toilets

Graphic Arts Lab

- Classroom
- Lab area
 - Press
 - Composing
 - Planning
- Office and supply room
- Stock room
- Photo lab
- Toilet and locker room

Metals Lab

- Classroom
- Lab area
 - Bench
 - Machine
 - Hot metal
 - Welding
 - Tool cabinet
 - Display cabinet
- Office and supply room
- Project storage - 3 units
- Adult storage - 1 unit
- Material storage
- Finishing room
- Toilet and lockers

Woods Lab

- Classroom
- Lab area
 - Bench
 - Machine
 - Glue and assembly
 - Tool cabinet
 - Display cabinet
- Office and supply room
- Project storage - 3 units
- Adult storage - 1 unit
- Lumber storage
- Finishing Room
- Toilet and lockers

		<u>Total Sq. Ft.</u>
Plant Nursery*		
Saran House		1500
Environmental Control		1500
Mist Box		96
Soil, Gravel 7 Compost Bin		400
Ornamental Horticulture Area		
Planting Area	5,000 to 10,000	
Greenhouses (2) Lumite		800
Greenhouses (2) Gravel		800
Environmental Control		1500
Mist Boxes (2)		32
Turf Grasses	400 to 600	
Storage Area		140
Equipment Shed		240
Plant Benches in all Lath Houses		
m. <u>Industrial Arts</u>		
General Industrial Arts Lab. (Inter)		3200
Classroom	520 sq. ft.	
Lab Area	1695	
Paint Rm. & Paint Storage	125	
Project Storage (5 units)	455	
Material & Supply Storage	167	
Office	80	
Toilet Facilities	168	
Power & Automotive Mechanics Lab.		
Classroom	520	4800
Lab Area-Outside	-	
Work Area-Inside	3120	
Bench Work		
Engine, Stationary		
Service		
Repair & Testing		
Tool & Display Cabinet		
Office	80	
Supply Room	200	
Locker Room & Toilets	320	
Combustible Liquid Storage	80	
Storage & Parts Room	150	
Air Compressor Shed	30	
Automotive Spray Booth	300	

*Plant nursery activities will be carried out in one-man departments for ornamental course of study; this portion of the requirements will not be included in a two-teacher department.

		Total Sq. Ft.
Drafting Room		1820
Drawing Area	1720	
Display Cabinet		
Model Making		
Raised Platform		
Instrument Cabinet		
Storage	100	
Electricity & Electronics Lab		3200
Classroom	520	
Lab Area	1370	
Communications Room	200	
Testing Room	150	
Project Storage-3 units	270	
Adult Storage	90	
Office	80	
Supply Room	200	
Toilet & Locker	320	
Graphic Arts Lab.		3200
Classroom	520	
Lab Area	1830	
Press		
Composing		
Planning		
Office	80	
Supply Room	50	
Stock Room	200	
Photo Lab	200	
Toilet & Locker	320	
Metals Lab.		3520
Classroom	520	
Lab Area	1960	
Bench		
Machine		
Hot Metal		
Welding		
Tool Cabinet		
Display Cabinet		
Office	80	
Supply	50	
Project Storage- 3 units	270	
Adult Storage	90	
Material Storage	140	
Finishing Room	90	
Toilet & Lockers	320	

Total
Sq. Ft.

Wood Lab.	
Classroom	520
Lab Area	2100
Bench	
Machine	
Glue & Assembly	
Tool Cabinet	
Display Cabinet	
Office	80
Supply	50
Project Storage	270
Adjut Storage	90
Lumber Storage	100
Finishing Room	180
Toilet & Lockers	290

3680

n. Newswriting and Year Book Production

(Space standards to be developed later.)

SECTION 1G - ENVIRONMENTAL PROTECTION

The Contractor shall comply with the following requirements for pollution control in performing all construction activities:

1. RUBBISH DISPOSAL

- a. No burning of debris and/or waste materials shall be permitted on the project site.
- b. No burying of debris and/or waste material except for materials which are specifically indicated elsewhere in these specifications as suitable for backfill shall be permitted on the project site.
- c. All unusable debris and waste materials shall be hauled away to an appropriate off-site dump area. During loading operations, debris and waste materials shall be watered down to allay dust.
- d. No dry sweeping shall be permitted in cleaning rubbish and fines which can become airborne from floors or other paved areas. Vacuuming, wet mopping or wet or damp sweeping is acceptable.
- e. Enclosed chutes and/or containers shall be used for conveying debris from above to ground floor level.
- f. Cleanup shall include the collection of all waste paper and wrapping materials, cans, bottles, construction waste materials and other objectionable materials, and removal as required. Frequency of cleanup shall coincide with rubbish producing events.

2. DUST

- a. Dust shall be kept down at all times, including non-working hours, weekends and holidays, by sprinkling water.

Work done by the Contractor in complying with this requirement shall be done and paid for in accordance with Subsection 4.2(e) "Force Account Work" and Subsection 9.4(d) "Force Account Work" of the General Requirements and Covenants, respectively, except for the following work:

- 1) For areas planted with ground cover and grass, payment for sprinkling water for dust control will not apply as soon as planting is initiated and thereafter. Such sprinkling shall be considered as maintenance, and its cost shall be included in the lump sum bid price.
- 2) Sprinkling during the compaction period (starts as soon as material is delivered to the fill area until the compacted layer is accepted by the Engineer) shall be considered as water required for the compaction of the material and shall not be paid for under this section. The cost shall be included in the lump sum bid price.

Payment shall be made by Change Order at the end of each month.

- b. Wet grinding, when required by the Engineer in correcting an error made by the Contractor, shall be done at no cost to the State.
- c. Wet cutting will be required for cement masonry blocks, concrete and asphaltic concrete pavements unless attachments are used with dry cutting equipment to capture the dust created thereby.
- d. No unnecessary shaking of bags will be permitted where cement, mortar and plaster mixing is done unless the dust therefrom can be confined.
- e. No dry power brooming will be allowed in unconfined areas. Vacuuming, wet mopping, wet sweeping, or wet power brooming may be used instead. Air blowing will be permitted only for cleaning erected forms prior to pouring.

3. NOISE

- a. All internal combustion engine powered equipment shall have mufflers to minimize noise.
- b. No blasting and use of explosives will be permitted without prior approval of the Engineer.
- c. Pile driving operations shall be confined to the period between 8:00 a.m. and 5:30 p.m., Monday through Friday. Pile driving will not be permitted on weekends and legal State and Federal holidays. (NOT REQUIRED)
- d. Starting up of non-highway vehicular equipment shall not be done prior to 6:45 a.m. without prior approval of the Engineer.

4. EROSION

During interim grading operations the grade shall be maintained so as to preclude any damages to adjoining property from water and eroding soil. Temporary berms, cut-off ditches, and other provisions which may be required because of the Contractor's method of operation shall be installed at no cost to the State. Drainage outlets and silting basins shall be constructed and maintained as shown on the plans.

5. OTHERS

- a. Wherever trucks and/or vehicles leave the site and enter surrounding paved streets, the Contractor shall prevent any material from being carried onto the pavement. Waste water shall not be discharged into existing streams, waterways, or drainage systems such as gutters and catch basins unless treated to comply with Department of Health water pollution regulations.
- b. Trucks hauling debris shall be covered as required by PUC Regulation. Trucks hauling fine materials shall be covered.

- c. No dumping of waste concrete will be permitted at the job site unless otherwise permitted in the Special Provisions.
- d. Except for rinsing of the hopper and delivery chute, and for wheel washing where required, concrete trucks shall not be cleaned on the job site.
- e. Except in an emergency, such as a mechanical breakdown, all vehicle fueling and maintenance shall be done in a designated area. A temporary berm shall be constructed around the area when runoff can cause problems.
- f. Spray painting will not be allowed unless done by the "airless spray" process.

6. SUSPENSION OF WORK

Violation of any of the above requirements or any other pollution control requirements which may be specified in the Technical Specifications herein shall be cause for suspension of the work creating such violation. No additional compensation shall be due the Contractor for remedial measures to correct the offense. Also, no extension of time will be granted for delays caused by such suspensions.

If no corrective action is taken by the Contractor within 72 hours after a suspension is ordered by the Engineer, the State reserves the right to take whatever action is necessary to correct the situation and to deduct all costs incurred by the State in taking such action from monies due the Contractor.

The Engineer may also suspend any operations which he feels are creating pollution problems although they may not be in violation of the above mentioned requirements. In this instance, the work shall be done by force account as described in Subsection 4.2(e) "FORCE ACCOUNT WORK" of the General Requirements and Covenants and paid for in accordance with Subsection 9.4(b) "FORCE ACCOUNT WORK" therein. The count of elapsed working days to be charged against the contract in this situation shall be computed in accordance with Subsection 8.8(d) "CONTRACT TIME" of the General Requirements and Covenants.

NOTE TO ARCHITECT: Notify the Public Works Engineer in writing at or before the Pre-Final submittal of any proposed changes to the above requirements.

For Inclusion in SPECIAL PROVISIONS (FORMAT)

3. ALLOWANCES

- a. The Contractor shall include in his Lump Sum Bid price the cash allowance for the utility work to be performed by the respective utility companies as indicated in the Technical Specifications Sections listed below. The cash allowance is an estimate only and is subject to increase or decrease depending on the actual cost of the work. The respective utility companies will bill the Contractor directly for all work performed by them. The Contractor shall be reimbursed for all work performed by the utility companies as defined in the plans and/or specifications based on the invoice cost to the Contractor. Additional charges by the Contractor for overhead, coordination, profit, insurance and any other incidental expenses shall not be allowed. These shall be included in his Lump Sum Bid.

The following cash allowances shall be included in the Proposal:

- (1) For Electrical Services (Section ____ page____) \$ _____
- (2) For _____ (Section ____ page____) \$ _____
- (3) For _____ (Section ____ page____) \$ _____
- TOTAL UTILITY WORK ALLOWANCE \$ _____